



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,843	11/06/2001	Kazutoshi Kaizuka	45144.00035	8950

7590 10/29/2004

Dave B. Koo, Esq.  
Squire, Sanders & Dempsey L.L.P.  
14th Floor  
801 S. Figueroa Street  
Los Angeles, CA 90017-5554

EXAMINER

SPISICH, MARK

ART UNIT	PAPER NUMBER
----------	--------------

1744

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/039,843

Applicant(s)

KAIZUKA, KAZUTOSHI

Examiner

Mark Spisich

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-6 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6 and 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Muhler et al (USP 3,613,143). The patent to Muhler discloses a brush (20) which may be a toothbrush comprising a base (26) and a handle attached thereto and further including a plurality of bristles (22) extending from the base with the bristles being a plastic material (nylon: column 3, lines 24-31) which plastic material includes a powder additive which bristles may be 2-10% by weight abrasive (column 3, lines 46-48) and wherein the additive may include zirconium silicate (which is a multi-element silicon-based material) and alumina (which is one of the disclosed far-infrared emitting materials) and mixtures thereof (see column 3, lines 49-57).

3. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Masterman et al (USP 5,722,106). The patent to Masterman discloses a toothbrush (10) comprising a base (14), handle (12) and bristles (16) attached to the base and which bristles are comprising of a plastic material which may be a nylon (column 5, lines 37-50) which plastic bristles further include an additive which may be from 0.2 to about 25%, and preferably about 0.5% to about 5% of the bristle (column 3, lines 56-62) and which additive may be selected from a number of materials (column 3, line 63 thru

Art Unit: 1744

column 4, line 32) **and combinations thereof**, said materials including zirconium silicate (which would be the multi-element silicon-based mineral) and alumina (which is one of the identified far-infrared emitting materials).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muhler et al (USP 3,613,143) in view of JP 63150011. The patent to Muhler discloses a toothbrush including plastic bristles (22) including a powder additive which additive may include a number of materials (any mixtures thereof) including a multi-element silicon-based mineral (zirconium silicate) and including alumina (column 3, lines 49-57). Muhler also states that "other" materials in this category may be used (column 3, line 57). With regard to claim 11, the patent to Muhler fails to disclose one of the materials listed in lines 5-6 thereof. '011 powder additive also in a toothbrush bristle and which is at least one compound selected from **alumina**, zirconia, **magnesia**, etc. Given the suggestion in Muhler that other additives may be used and the teaching in '011 that magnesia and alumina are known to one of ordinary skill as toothbrush additives, one of ordinary skill would deem it obvious to include magnesia as one of the additives used in the bristles of Muhler. Muhler, with regard to claim 13, discloses

Art Unit: 1744

mixtures of the additives may be used and that '011 also discloses the mixture of alumina and magnesia.

6. Claims 11, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masterman et al (USP 5,722,106) in view of JP 63150011. The patent to Masterman discloses a toothbrush (10) including a base (14), handle (12) and bristles (160) extending from the base and which bristles are of a plastic material (column 5, lines 37-50) which plastic materials includes an additive selected from numerous materials **and combinations thereof** (column 3, line 62 thru column 4, line 32). This list of materials includes zirconium silicate (which would be the recited multi-element silicon-based mineral) as well as alumina (claim 13) and silicon dioxide (claim 15) (which are two of the identified far-infrared emitting materials). The patent to Masterman discloses the invention substantially as claimed with the exception of one of the materials recited in lines 5-6 of claim 11 or one of these material in addition to alumina (claim 13) or silica (claim 15). '011 discloses a bristle additive to a toothbrush which additive includes **alumina**, zirconia, **magnesia**, etc. As such, '011 teaches that magnesia belongs to the family of materials (including alumina) recognized by the art as an additive for a toothbrush bristles and that the addition of magnesia in combination with one of the materials (especially alumina) of Masterman would thus be an obvious choice of design to one having ordinary skill in the art.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

Art Unit: 1744

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

**A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).**

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 2-6 and 11-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,357,075. Although the conflicting claims are not identical, they are not patentably distinct from each other because at least some of the claims in the instant application would be anticipated by the structure recited in the claims of the patent, with the only distinction being the preamble (a hairbrush as opposed to a toothbrush). A claim drawn to essentially the same structure as that of a prior patent is not distinguished merely by implying a different intended use thereof.

#### ***Allowable Subject Matter***

9. Claims 2-6 are allowed, with the exception of the double-patenting rejection.
10. Claims 12,14,16,18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. It is noted that, per applicant's remarks, each of claims 2-6,12,14,16,8 and 19 requires all of the elements/materials recited or listed therein.

***Response to Arguments***

12. Applicant's arguments filed 21 June 2004 with respect to the newly added claims have been considered but are moot in view of the new ground(s) of rejection. Applicant should note that the arguments/remarks pertaining to claims 2 and 5 have been deemed persuasive relative to the prior art.

***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Spisich whose telephone number is (571) 272-1278. The examiner can normally be reached on M-Th (5:30-3:00), Alternate Fri off.



Art Unit: 1744

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Spisich  
Primary Examiner  
Art Unit 1744

MS